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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,285	10/16/2003	Jeffrey Donald Manuell	ROC920030361US1	7541
30206	7590	04/10/2006	EXAMINER	
IBM CORPORATION ROCHESTER IP LAW DEPT. 917 3605 HIGHWAY 52 NORTH ROCHESTER, MN 55901-7829			CAO, CHUN	
			ART UNIT	PAPER NUMBER
			2115	

DATE MAILED: 04/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/687,285	MANUELL ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Chun Cao	2115	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 October 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### DETAILED ACTION

1. Claims 1-29 are presented for examination.
2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The current title is imprecise.

#### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitations "the operation" in line 1; "the current state" in line 7.

There are insufficient antecedent basis for the limitations in the claim.

Claim 4 recites the limitation "the current time" in line 2. There is insufficient antecedent basis for the limitation in the claim.

Claims 2-8 are rejected because they incorporate the deficiencies of claim 1.

Claim 9 recites the limitations "the operation" in line 1; "the current state" in line 8.

There are insufficient antecedent basis for the limitations in the claim.

Claim 12 recites the limitation "the current time" in line 2. There is insufficient antecedent basis for the limitation in the claim.

Claims 10-16 are rejected because they incorporate the deficiencies of claim 9.

Claim 17 recites the limitations "the operation" in line 1; "the operating environment" in lines 4-5; "the current state" in line 14; "the current load", in line 15; "the

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criticality value" in line 16. There are insufficient antecedent basis for the limitations in the claim.

Claim 21 recites the limitation "the current time" in line 2. There is insufficient antecedent basis for the limitation in the claim.

Claim 27 recites the limitation "the one or more pager" in lines 3-4. There is insufficient antecedent basis for the limitation in the claim.

Claims 18-28 are rejected because they incorporate the deficiencies of claim 17.

Claim 29 recites the limitations "the operation" in line 4; "the current state" in line 9. There are insufficient antecedent basis for the limitations in the claim.

***Claim Rejections - 35 USC § 101***

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 9 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 9 is not limited to tangible embodiments. In view of Applicant's disclosure, specification page 12, paragraph 0031, the medium is not limited to tangible embodiments, instead being defined as including both tangible embodiments and intangible embodiments such as signals, waveforms, transmissions and communication link which are non-statutory subject matter. As such, the claim is not limited to statutory subject matter and is therefore non-statutory. Specifically, the claims recite computer program in a computer readable media. The computer readable media as described in the specification

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includes communication links and computer program on communication links is not a proper manufacture under 35 U.S.C. 101. For purposes of examination it will be interpreted that the media is statutory subject.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1, 5, 7, 9, 13, 15 and 29 are rejected under 35 U.S.C. 102(e) as being anticipated by Nakagawa, U.S. patent no. 6,990,593 (hereinafter "Nakagawa").

As per claim 1, Nakagawa teaches a method for managing an operation of a computing complex having one or more computer servers during a utility outage [figures 2, 3], the method comprising the steps of:

monitoring one or more operating environment parameters within the computing complex [fig. 3; col. 3, lines 9-16]; and

selectively powering down one or more of the computer servers based on a current state of the operating environment parameters and a criticality value assigned to each of the one or more computer servers [fig. 3, col. 3, lines 26-40].

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As per claim 5, Nakagawa teaches the computing complex is powered by at least one battery driven uninterruptible power supply during the utility outage [figures 2, 4; col. 3, lines 45-50; col. 4, lines 27-32].

As per claim 7, Nakagawa teaches the utility outage is a power failure [col. 3, lines 19-20].

Regarding to claims 9, 13 and 15, Nakagawa teaches the claimed method of steps as set forth hereinabove. Therefore, Nakagawa also teaches the computer program stored in a computer-readable medium to carry out the method of steps.

As per claim 29 is contained the same limitations as claim 1. Therefore, same rejection is applied.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 2 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakagawa, U.S. patent no. 6,990,593 in view of Langer et al. (Langer), US patent no. 5,381,554.

As to claims 2 and 10, Nakagawa does not explicitly teach that one or more operating environment parameters include remaining battery operating time of at least one uninterruptible power supply powering the computing complex:

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Langer teaches that one or more operating environment parameters include remaining battery operating time of at least one uninterruptible power supply powering the computing complex [fig. 2; col. 5, lines 29-45].

It would have been obvious to one of ordinary skill in the art at time the invention to combine the teachings of Nakagawa and Langer because they both teach a method of controlling UPS, the specify teachings of Langer stated above would improve the performance and reliability of Nakagawa system by considering battery running time as a parameter to better control the UPS.

10. Claims 3, 4, 8, 11, 12 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakagawa, U.S. patent no. 6,990,593 in view of Bodas (Bodas), US publication no. 2004/0163001.

As to claims 3 and 11, Nakagawa does not explicitly teach that one or more operating environment parameters include one or more ambient temperature readings within the computing complex. In other word, Nakagawa does not teach a thermal manager for reading temperature in the system.

Bodas teaches that a thermal manager for reading temperature in the computer network system [fig. 3; paragraphs 0032, 0035, 0053].

It would have been obvious to one of ordinary skill in the art at time the invention to combine the teachings of Nakagawa and Bodas because they both teach a method of controlling UPS, the specify teachings of Bodas stated above would improve the performance and reliability of Nakagawa system by considering the temperaturè of the system as a parameter to better control the UPS.

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As to claims 4 and 12, Bodas inherently teaches one or more operating environment parameters include a current time of day [paragraph 0059].

As to claims 8 and 16, Bodas inherently teaches of the utility failure is a cooling failure within the computer complex [paragraphs 0032 0035, 0053].

11. Claims 6 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakagawa, U.S. patent no. 6,990,593 in view of Hammond et al. (Hammond), US patent no. 6,865,685.

As to claims 6 and 14, Nakagawa does not explicitly teach of sending pager text messages to a predetermined set of support personnel based on the current state of the operating environment parameters.

Hammond teaches of sending pager text messages to a predetermined set of support personnel based on the current state of the operating environment parameters [col. 3, lines 11-14].

It would have been obvious to one of ordinary skill in the art at time the invention to combine the teachings of Nakagawa and Hammond because the specify teachings of Hammond stated above would improve the reliability of Nakagawa system.

12. Claims 17, 18 and 20-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bodas (Bodas), US publication no. 2004/0163001 in view of Nakagawa, U.S. patent no. 6,990,593.



As per claim 17, Bodas discloses an apparatus for managing an operation of a computing complex comprising one or more computer servers during a utility outage [FIG. 2], the apparatus comprising:

- a set of environment equipment for maintaining an operating environment of the computing complex [fig. 3];

- an environment monitor server [280, fig. 3; paragraph 0037] coupled to the set of environment equipment for monitoring the current state of one or more operating environment parameters within the computing complex [paragraphs 0029, 0032];

- a set of control files for determining a current load shed category for the computing complex [paragraph 0035, 0059];

- a centralized load shedding manager coupled to the environment monitor server and the set of control files, a centralized load shedding manager adjusting power for one or more of the computer servers based on a current state of the one or more environment parameters, the current load shed category for the computing complex and a criticality value assigned to each of the one or more computer servers [paragraphs 0050, 0051, 0076].

Bodas does not explicitly teach of managing the selective powering down of one or more of the computer servers based on the current state of the one or more environment parameters.

Nakagawa teaches of managing the selective powering down of one or more of the computer servers based on the current state of the one or more environment parameters [fig. 3, col. 3, lines 26-40].

It would have been obvious to one of ordinary skill in the art at time the invention to combine the teachings of Nakagawa and Bodas because they both teach a method of controlling UPS, the specify teachings of Nakagawa stated above would improve the performance of Nakagawa system by further reducing the power consumption of Bodas system by powering off one or more servers.

As per claim 18, Bodas discloses the set of environment equipment includes at least one member chosen from the group consisting of: an uninterruptible power supply (UPS), a power distribution unit (PDU), a static transfer switch (STS), an air handling unit (AHU), and a temperature probe [paragraphs 0032, 0039].

As per claim 20, Bodas discloses that one or more operating environment parameters include one more ambient temperature reading provided by the temperature probe [fig. 3; paragraphs 0032, 0035, 0053].

As per claim 21, Bodas inherently teaches one or more operating environment parameters include a current time of day [paragraph 0059].

As per claim 22, Nakagawa teaches the computing environment is powered by the uninterruptible power supply during the utility outage [figures 2, 4; col. 3, lines 45-50; col. 4, lines 27-32].

As per claim 23, Nakagawa teaches the utility outage is a power failure [col. 3, lines 19-20].

As per claim 24, Bodas inherently teaches of the utility failure is a cooling failure within the computer complex [paragraphs 0032 0035, 0053].

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As per claim 25, Bodas inherently discloses that the set of control files includes a load shedding master table [paragraphs 0050, 0051, 0076].

13. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bodas (Bodas), US publication no. 2004/0163001 in view of Nakagawa, U.S. patent no. 6,990,593 and Langer et al. (Langer), US patent no. 5,381,554.

As to claim 19, Bodas and Nakagawa do not explicitly teach that one or more operating environment parameters include remaining battery operating time of at least one uninterruptible power supply powering the computing complex.

Langer teaches that one or more operating environment parameters include remaining battery operating time of at least one uninterruptible power supply powering the computing complex [fig. 2; col. 5, lines 29-45].

It would have been obvious to one of ordinary skill in the art at time the invention to combine the teachings of Bodas and Nakagawa and Langer because they teach a method of controlling UPS, the specify teachings of Langer stated above would improve the performance and reliability of Bodas-Nakagawa system by considering battery running time as a parameter to better control the UPS.

14. Claims 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bodas (Bodas), US publication no. 2004/0163001 in view of Nakagawa, U.S. patent no. 6,990,593 and Hammond et al. (Hammond), US patent no. 6,865,685.

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As to claims 26 and 27, Bodas and Nakagawa do not explicitly disclose a load shedding pager table. In other words, Bodas and Nakagawa does not explicitly teach of sending pager text messages to a predetermined set of support personnel according to the load shedding pager table.

Hammond inherently discloses that a load shedding pager table for sending pager text messages to a predetermined set of support personnel [col. 3, lines 11-14].

It would have been obvious to one of ordinary skill in the art at time the invention to combine the teachings of Bodas and Nakagawa and Hammond because the specific teachings of Hammond stated above would improve the reliability of Bodas-Nakagawa system.

15. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bodas (Bodas), US publication no. 2004/0163001 in view of Nakagawa, U.S. patent no. 6,990,593 and Ewing et al. (Ewing), US patent no. 5,949,974.

As per claim 14, Bodas and Nakagawa do not explicitly disclose one or more simple network management protocol (SNMP) traps.

Official Notice is taken that the simple network management protocol (SNMP) traps is very well known in the computer art. Such as, Ewing discloses simple network management protocol (SNMP) traps [fig. 1, col. 5, lines 26-36].

It would have been obvious to one of ordinary skill in the art at time the invention to combine the teachings of Bodas and Nakagawa and Ewing, the specific teachings of Ewing stated above would improve the performance by implementing SNMP protocol in Bodas-Nakagawa system.

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chun Cao whose telephone number is 571-272-3664. The examiner can normally be reached on Monday-Friday from 7:30 am-4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas C. Lee can be reached on 571-272-3667. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Apr. 4 2006



**CHUN CAO**  
**PRIMARY EXAMINER**